
# NASA Weekly Update

Week of September 11-18, 2006

**9-17: STS-115 Crew Completes Inspections:** Trailing 50 miles behind the International Space Station, the STS-115 crew conducted an inspection of Space Shuttle Atlantis' heat shield this morning. The crew used the robotic arm and boom sensor system to ensure that the orbiter's leading wing edges and nose cap had not received damage from space junk and

*A camera aboard Space Shuttle Atlantis captured this view of the payload bay shortly before the start of the inspection of the shuttle's heat shield.*

micrometeoroids. Atlantis is scheduled to touch down at 5:57 a.m. Wednesday at the Shuttle Landing Facility at Kennedy Space Center, Fla. Landing will bring to an end STS-115's successful mission to the International Space Station. Atlantis departed the station at 8:50 a.m. Sunday. For more information, visit http://www.nasa.gov/shuttle.

**9-18: Expedition 14 Crew En Route to Station:** The Soyuz rocket carrying Expedition 14 into space lifted off from the Baikonur Cosmodrome in Kazakhstan at 12:09 a.m. EDT. Expedition 14 Commander Michael Lopez-Alegria and Flight Engineer Mikhail Tyurin are scheduled to arrive at the station at 1:24 a.m. Wednesday. Flying to the station with them will be American Anousheh Ansari, the first female spaceflight participant to visit the orbiting laboratory. She is flying under contract with the Russian Federal Space Agency. For more information, visit http://www.nasa.gov/station.

**9-18: Crew Detects Odor; Atmosphere Recovery Efforts Under Way:** Shortly before 7:30 a.m. EDT, the International Space Station Expedition 13 crew reported an odor in the Zvezda Service Module and manually activated an alarm to begin emergency procedures. The source of the odor was quickly determined to be an apparent leak of potassium hydroxide in the station's Elektron oxygen generation system. Potassium hydroxide, or caustic potash, can be an irritant to crew members, but is not a classified as a life-threatening toxin. For more information, visit http://www.nasa.gov/station.

**9-15: NASA Awards Thermal Protection Contract for Orion Spacecraft:** NASA has selected The Boeing Company, Huntington Beach, Calif., to support the design and development of a lunar direct return-capable heat shield for the Orion crew exploration vehicle. For more information about the heat shield, visit the Orion section of the NASA portal: http://www.nasa.gov/orion.

**9-14: NASA Exercises Payload Processing Services Contract Option:** NASA's Kennedy Space Center, Fla., will extend its Checkout, Assembly, and Payload Processing Services contract for three years with Boeing Space Operations Company of Titusville, Fla., a wholly owned subsidiary of The Boeing Company, Chicago. The contract extension and modification, valued at $278.5 million, covers Oct. 1, 2006, through Sept. 30, 2009. The total contract value including exercised and unexercised options is approximately $846 million.

**9-14: NASA Extends Lockheed Martin Mission Support Contract:** NASA has awarded a potential five-year, $448.86 million contract extension to Lockheed Martin Space Operations (cont'd on pg. 2)

Co., Houston, for space shuttle and International Space Station mission operations support work. Under the contract, Lockheed Martin and its subcontractors perform space operations and data services support work for space shuttle missions and International Space Station expeditions.

**9-13: NASA Television Sets Coverage of Station Crew Exchange:** The launch of the next International Space Station crew, Expedition 14, and the landing of the current crew, Expedition 13, are among events that will be broadcast live on NASA Television Sept. 17-29. For the latest on broadcast coverage of Soyuz events, check the continuously updated STS-115 mission NASA TV schedule at: http://www.nasa.gov/multimedia/nasatv/mission_schedule.html. For NASA TV streaming video, downlink and scheduling information, visit: http://www.nasa.gov/ntv.

**9-13: NASA Sees Rapid Changes in Arctic Sea Ice:** NASA data shows that Arctic perennial sea ice, which normally survives the summer melt season and remains year-round, shrunk abruptly by 14 percent between 2004 and 2005. According to researchers, the loss of perennial ice in the East Arctic Ocean neared 50 percent during that time as some of the ice moved from the East Arctic to the West. A team led by Son Nghiem of NASA's Jet Propulsion Laboratory, Pasadena, Calif., used NASA's QuikScat satellite to measure the extent and distribution of perennial and seasonal sea ice in the Arctic. For more information about QuikScat, visit: http://winds.jpl.nasa.gov/missions/quikscat/index.cfm.

**9-12: NASA Names Parsons New Kennedy Space Center Director:** NASA Administrator Michael Griffin today named William (Bill) W. Parsons the new director of the agency's Kennedy Space Center, Fla., effective in January 2007. Parsons succeeds James W. Kennedy, who is retiring. Parsons currently serves as deputy director of NASA Kennedy Space Center, a position he has held since February.

**9-11: NASA Selects 12 Research Proposals in Radiation Biology:** NASA will fund a dozen new research proposals to better understand and reduce the risks that crews of future moon and Mars missions could face from space radiation. The total potential value of the selected proposals is approximately $14 million. The 12 new research areas were selected by the Space Radiation Program from 82 proposals received in response to a NASA Research Announcement. All of the proposals were peer-reviewed by scientific and technical experts from academia, government, and industry.

## Weekly Status Reports

### Expendable Launch Vehicles (ELV)

Mission: Solar Terrestrial Relations Observatory (STEREO)
Launch Pad: 17-B, Cape Canaveral Air Force Station
Launch Vehicle: Boeing Delta II
Launch Date: No earlier than Oct. 25, 2006
Launch Time: TBD

At Pad 17-B, the Delta II second stage was destacked on Sept. 6 for further testing to determine the thickness of the tank in identified areas. The initial test procedures are complete and the results are being assessed. These results will be used with continuing analytical evaluation to determine the flight worthiness of the second stage. This should be concluded in about a week. In the meantime, workers will reinstall the engine on the second stage. STEREO remains at the Astrotech Space Operations Facility. For previous expendable launch vehicle processing status reports, visit: http://www.nasa.gov/centers/kennedy/launchingrockets/status/2006.

### Upcoming Events

- **NET Oct. 25:** STEREO launch at Cape Canaveral Air Force Station, FL.
- **NET Dec 11:** Air Force Research Laboratory's TacSat 2 satellite launch from NASA Wallops Flight Facility, Wallops Island, VA
- **NET Dec 14:** Launch of Space Shuttle Discovery for mission STS-116 to the International Space Station.

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